

### REMARKS

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested.

Claims 1-57 are in this case as filed. Claims 1, 23, 36, and 45 have been rejected under § 112, second paragraph. Claims 1, 4-9, 11, 18, 19-27, 29-33, 36, 44 and 45 are rejected under § 102(b). Claims 2,3,10,12-17,28,34,37-43, and 46-57 are rejected under § 103. Claims 1, 8, 16, 17, 23, 36 and 45 have been amended. Claim 18 has been cancelled. New claim 58 has been added. No extra claim fee is required.

It has come to attention from publication of 20020157521 A1 that while FIGs. 2A, 11C, 12 and 13B, appear at their proper places on drawing sheets 2, 15, 17 and 19, they re-appear at the end of the publication on sheets 23-26. Accordingly, these duplicate sheets have been cancelled.

The claims before the Examiner are directed toward a system and method for teaching playing of a musical instrument without a human teacher. The system includes a series of lessons stored in a computer program, each lesson being programmed to include automatic dynamic playing by a computer of at least one learning passage, and a period of silence for playing of the learning passage by a student on an independent, stand-alone musical instrument. It is a particular feature of the invention that the computer plays the learning passage, with sound, so that the student can hear the passage and then copy it by playing on his own instrument. The instrument is not connected to the computer for feedback. Rather, the ear of the student is trained over time to hear when his playing sounds like the playing of the computer. The claims are also directed to a system and method of composing original music on a computer. The method includes activating at least one composition command in the

computer to compose the song, the composition command being selected from selecting a base note, and selecting a note length, and causing the computer to display a selected note at a selected length on a staff, so as to compose a song.

#### **§ 112, Second Paragraph Rejections**

The Examiner has rejected claims 1 and 36 under § 112, second paragraph, as being incomplete for omitting essential elements. Specifically, the Examiner has pointed out that there is no recitation of how one is learning. Applicant thanks the Examiner for pointing this out. What is clearly recited are the elements and steps of teaching how to play an instrument, and this is reflected in the amended claims, in the revised title and the amended abstract. Support for this amendment is found in the printed specification, for example in paragraph 0033, lines 1-2, paragraph 0037, and paragraph 0042, lines 1-3 (references to paragraphs herein refer to the publication of the present application, no. 20020157521 A1). Thus, claims 1 and 36 have been amended to indicate that the invention relates to a system for teaching playing a musical instrument, all the elements of which are recited.

Similarly, the Examiner has rejected claims 23 and 45 under § 112, second paragraph, as being incomplete for omitting essential steps. *Claim* 23 has also been amended to indicate that the invention relates to a method for teaching playing a musical instrument, all the steps of which are recited.

The Examiner has also rejected claims 36 and 45 under § 112, second paragraph, as being omnibus type claims. Claims 36 and 45 have been amended to include additional elements and are respectfully deemed to no longer be omnibus claims.

Accordingly, it is respectfully submitted that claims 1, 23, 36, and 45 as amended are now deemed to be definite, and to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required by §112.

#### **§ 102(b) Rejection - Renard et al.**

The Examiner has rejected claims 1, 4-9, 11, 18, 19-27, 29-33, 36, 44 and 45 under §102(b) as being unpatentable over Renard et al (USP 6,066,791). Specifically, the Examiner states that Renard et al. disclose a system and method for learning playing of a musical instrument without a teacher, the system comprising: a series of lessons stored in a computer program, each lesson being programmed to include automatic dynamic playing of at least one learning passage by a computer, and a period of silence of a pre-defined length relative to said learning passage, for playing of said learning passage by a student on a musical instrument.

It is respectfully submitted that the Examiner has misinterpreted the system and method of Renard et al. Renard et al. describe and claim a method and apparatus for instructing a student how to sight read music on a staff, and how to play a musical instrument (col. 2, lines 30-44). The musical instrument is connected to the computer (col. 4, lines 62-63 and Figure 1), and the computer monitors the student's playing (col. 5, lines 1-5 and 31-34) by comparing the notes played by the student with those the student was supposed to play. There is no period of silence during which the student plays back the learned material (col. 7, lines 26-36).

In Renard, there is no teaching or suggestion of music played by the computer, i.e., sounds generated by the computer corresponding to notes appearing on the screen. Rather, the audio device outputs verbal directions or the words of an instructor on a video (col. 10, lines 16-19) or the notes played by the student on his instrument (col. 10, lines 24-26). The student strikes a key to display a different interval to be learned, or to identify the name of an interval, or the computer displays music for the student to play **without hearing it**.

In sharp contrast with the Renard apparatus, according to the present invention, the computer plays (**with** sound) each portion to be learned by the student. This is followed by a period of silence during which the student plays the portion, i.e., copies the sound heard on the computer, and the student monitors his own playing, thereby developing his ear for hearing errors. See, for example, par. 0054, lines 9-19, and par. 0066, lines 1-11, of the printed specification.

While continuing to traverse the Examiner's rejections, Applicant has, in order to expedite the prosecution, chosen to amend independent claims 1 and 23 in order to clarify and emphasize the crucial distinctions between the present invention and the system disclosed by the Renard patent cited by the Examiner. Specifically, independent claims 1 and 23 have been amended to clarify that the musical instrument is free-standing, independent of the computer. Support for this amendment can be found in the printed specification, for example in paragraph 0033, lines 7-9, and in original claim 18.

With regard to claims 36, 44 and 45, the Examiner states that Renard et al. disclose the system, further comprising a composition portion including, means for activating, by means of a button, at least one composition command to compose a song, and points to Fig. 9. It is respectfully submitted that Renard et al. do not teach or suggest, anywhere in the patent, the possibility of composing an original song. Figure 9 is a screen shot of the display on the display device illustrating an image moving between a set of two staves (col. 4, lines 44-46). This display has two purposes, which are described in detail from col. 9, line 25, to col. 10, line 26. First, the image is displayed on the screen to teach the student to focus on a constant point while trying to read the nearby musical notes with his or her peripheral view (col. 9, lines 42-44). Preferably, the student is initially instructed to focus on the anchor without trying to play the musical piece (col. 9, lines 65-68). Subsequently, the student attempts to play the musical piece being displayed, while the computer monitors the musical instrument to determine whether the student is playing the musical piece correctly. (col. 10, lines 7-16) Thus, there is no mention in any way, shape or form of composing an original song.

In sharp contrast with the Renard apparatus, according to the present invention, the computer permits a student or any other person to compose an original song by selecting notes and/or lengths of notes, and causing them to appear automatically in the appropriate location and with the appropriate appearance on a staff. The composed song can then be used as a lesson, like any other lesson, for teaching the student to play the song.

While continuing to traverse the Examiner's rejections, Applicant has, in order to expedite the prosecution, chosen to amend independent claims 36 and 45 in order to clarify and emphasize the crucial distinctions between the present invention and the system disclosed by the Renard patent cited by the Examiner. Specifically, independent claims 36 and 45 have been amended to clarify certain possible composition commands which can be performed by the computer on command of the composer of an original song. Support for this amendment can be found in the printed specification, for example in par. 0034, last 6 lines, par. 0076, lines 1-4, and par. 0079.

Applicants believe that the amendment of the claims completely overcomes the Examiner's rejections on § 102(b) grounds as to independent claims 1, 23, 36 and 45. Since claims 4-9, 11, 18, 19-22 depend from claim 1, and since claims 24-27, 29-33 depend from claim 7, and since claim 44 depends from claim 36, it is believed that all of claims 1, 4-9, 11, 18, 19-27, 29-33, 36, 44, and 45 rejected on § 102 grounds are now allowable.

#### **§ 103 Rejection - Renard et al. and Eller**

The Examiner has rejected claims 2,3,10,12-17,28,34,37-43, and 46-57 under § 103 as being unpatentable over Renard et al. in view of Eller (USP 6,201,174). Specifically, the Examiner states that Eller discloses a system, wherein each lesson includes a plurality of parameters, and said system includes means for selectively changing each of said parameters by the student. Further, he states that Eller discloses a method comprising: providing seven buttons (inherent) on a computer display, each button representing a different basic note; providing means for selecting at least one of said buttons by said student; and causing said computer to display the note represented by said selected button on a staff, so as to compose a song.

The patent to Renard et al. has been discussed above. The Eller patent discloses a method and system for producing an enhanced tablature notation for a musical score corresponding to a musician's alterations to the music of an instrument used to perform the

musical score, changes in the musician's method for performing the musical score, and alterations to the musical score's conventional staff notation (col. 3, lines 53-58). This method and system uses a computer to assist musicians in producing sheet music for musical compositions. An exemplary computing system for use with the computerized tablature composer of the invention includes a pen input device and a tablet, which transmit input gestures made by a musician to the computer. The display displays the input data as a tablature notation. (Col. 5, lines 41-42, 51-56, 60-66). Thus, this invention relates to conversion or translation of music written on a conventional staff (as for orchestral scores) to tablature notation (for stringed instruments).

There is no teaching or suggestion in Eller of playing music displayed on a screen as a lesson to teach a student to play a musical instrument. In fact, this system is not designed for teaching playing of music, but for providing tablature notation for a person writing on a conventional staff, and includes no lessons whatsoever. Thus, even combining the systems of Renard et al. and Eller would not result in the method or system of the present invention, as neither of them provides a music lesson wherein a computer plays a musical selection and is then silent so that a student can play back that musical selection on a musical instrument not connected to the computer.

Furthermore, there is no teaching or suggestion in Eller of composing an original song using his patented system. Rather, the notes to be transcribed into tablature must be written by hand by the pen on the tablet on a staff, or vice versa.

While continuing to traverse the Examiner's rejections, Applicants have, in order to expedite the prosecution, chosen to amend independent claims 36 and 45 in order to clarify and emphasize the crucial distinctions between the present invention and the system disclosed by the Eller patent cited by the Examiner. Specifically, independent claims 36 and 45 have been amended to clarify that the method and system are for composing an original song, and that the composition command to compose a song can be selected from selecting a basic note and selecting a note length, and that the computer automatically displays the note represented

by a selected note and note length on a staff, so as to compose an original song. Support for these amendments can be found throughout the printed specification. Specifically, in par. 0034, last 6 lines, and par. 0079.

Claims 1, 8, 16, 17, 23, 36 and 45 have been amended in order to more properly claim the subject matter which applicant deems to be *his* invention. A new claim 58 has been added to claim the novel capability of the present invention for the computer to automatically identify and divide songs of a practice session into periods, which is not known in any conventional computer music teaching program. Support for this amendment is found in paragraph [0063], lines 1-5. Claims 16 and 17 have been amended to correct an obviously incorrect dependency.

In view of the above amendments and remarks it is respectfully submitted that independent claims 1, 23, 36 and 45, and hence dependent claims 1-22, 24-35, 37-44, and 46-58, are in condition for allowance. Prompt notice of allowance is respectfully solicited.

Should the examiner be of the opinion that outstanding issues remain, it is requested that the undersigned attorney be called to discuss it.

Respectfully submitted,

---

Robert L. Stone  
Attorney for Applicant  
Reg. No. 22, 272  
732-254-2674